

WHAT IS CLAIMED IS:

- 100149030-122001
- Sub B4
1. A hair conditioning composition comprising by weight:
 - (a) from about 0.1% to about 20% of a cationic silicone emulsion comprising by weight of the cationic silicone emulsion from about 1% to about 20% of a cationic surfactant; and an emulsifiable amount of a silicone compound having a particle size of less than about 50 microns;
 - (b) from about 0.1% to about 15% of a high melting point fatty compound having a melting point of 25°C or higher;
 - (c) from about 0.1% to about 10% of a cationic conditioning agent; and
 - (d) an aqueous carrier.
 2. The hair conditioning composition according to Claim 1 wherein the cationic silicone emulsion comprises by weight from about 2% to about 8% of the cationic surfactant.
 3. The hair conditioning composition according to Claim 1 wherein the silicone compound has a particle size of from about 0.2 microns to about 2.5 microns.
 4. The hair conditioning composition according to Claim 1 wherein the silicone compound comprises a mechanically emulsified polydimethylsiloxane.
 5. The hair conditioning composition according to Claim 1-4 comprising by weight from about 0.55% to about 7% of the cationic conditioning agent; the cationic conditioning agent comprising:
 an amidoamine having the following general formula:

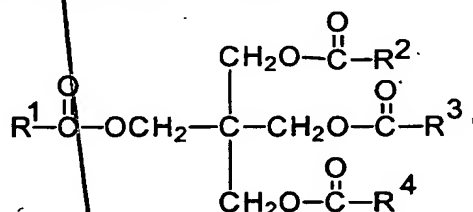
$$R^1 \text{ CONH} (\text{CH}_2)_m \text{ N} (\text{R}^2)_2$$
 wherein R^1 is a residue of C_{11} to C_{24} fatty acids, R^2 is a C_1 to C_4 alkyl, and m is an integer from 1 to 4; and
 a acid selected from the group consisting of L-glutamic acid, lactic acid, hydrochloric acid, malic acid, succinic acid, acetic acid, fumaric acid, L-glutamic acid hydrochloride, tartaric acid, and mixtures thereof.
- Sub A1

6. The hair conditioning composition according to Claim 1-4 further comprising by weight from about 0.1% to about 10% of a low melting point oil having a melting point of less than 25°C.

7. The hair conditioning composition according to Claim 6 wherein the low melting point oil is an unsaturated fatty alcohol.

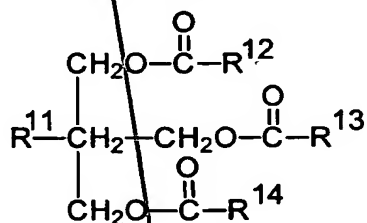
8. The hair conditioning composition according to Claim 6 wherein the low melting point oil is selected from the group consisting of:

(a) pentaerythritol ester oils having a molecular weight of at least about 800, and having the following formula:



wherein R¹, R², R³, and R⁴, independently, are branched, straight, saturated, or unsaturated alkyl, aryl, and alkylaryl groups having from 1 to about 30 carbons;

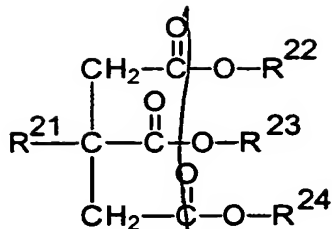
(b) trimethylol ester oils having a molecular weight of at least about 800, and having the following formula:



wherein R¹¹ is an alkyl group having from 1 to about 30 carbons, and R¹², R¹³, and R¹⁴, independently, are branched, straight, saturated, or unsaturated alkyl, aryl, and alkylaryl groups having from 1 to about 30 carbons;

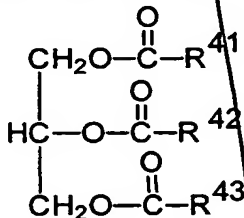
(c) poly-α-olefin oils derived from 1-alkene monomers having from about 6 to about 16 carbons, the poly α-olefin oils having a viscosity of from about 1 to about 35,000 cst, a molecular weight of from about 200 to about 60,000, and a polydispersity of no more than about 3;

(d) citrate ester oils having a molecular weight of at least about 500, and having the following formula:



wherein R^{21} is OH or CH_3COO , and R^{22} , R^{23} , and R^{24} , independently, are branched, straight, saturated, or unsaturated alkyl, aryl, and alkylaryl groups having from 1 to about 30 carbons;

(e) glyceryl ester oils having a molecular weight of at least about 500, and having the following formula:



wherein R^{41} , R^{42} , and R^{43} , independently, are branched, straight, saturated, or unsaturated alkyl, aryl, and alkylaryl groups having from 1 to about 30 carbons; and mixtures thereof.

9. The hair conditioning composition according to Claim 7 further comprising by weight from about 0.1% to about 10% of a polyethylene glycol having the formula:



wherein n has an average value of from 2,000 to 14,000.

10. A method of increasing hair volume by applying the hair conditioning composition according to any of the preceding claims to the hair.